

What is claimed is:

1. A method for controlling the speed of a vehicle (1), where,

- in the vehicle to be controlled, the yaw rate or rotation rate is measured, in particular to determine the curvature (k) of the vehicle's own travel trajectory, and where, using a proximity sensor or position sensor (6), at least one vehicle (8) traveling ahead or at least some other object within a sensor's sensing range (7) is detected, particularly with regard to an offset from the travel course of the vehicle to be controlled, wherein
- the travel-course offset (yv) of a vehicle (5,8) driving ahead, determined in preset measuring cycles, is delayed by a predefined time lag (t_{hist}), and using the then active curvature (k) of the travel trajectory, a historical travel-course offset (yc_{hist}) is ascertained.

2. The method as recited in Claim 1,

wherein the delay is selected such that the historical travel-course offset (yc_{hist}) is determined after approximately half of the distance between the vehicle (1) to be controlled and the measured vehicle (5,8).

3. The method as recited in Claim 1 or 2,

wherein the historical travel-course offset (yc_{hist}) is determined in accordance with the relation

$$yc_{hist} = yv_{hist} - k * d_{hist}^2 / 2,$$

d_{hist} likewise being generated or estimated as the historical distance between the vehicle (1) to be controlled and the measured vehicle (5,8) on the basis of a delay.

4. The method as recited in Claim 3,

wherein the historical distance (d_{hist}) is estimated according to the relation $d_{hist} = d_{active} -$

$$vr * t_{hist}$$

5. The method as recited in Claim 2 or 3,

wherein the time span until the maximum value (t_{hist}) is reached is supplemented by the component that increases with the duration of observation, to form ($t_{hist/dyn}$).

6. The method as recited in one of the preceding claims, wherein the instantaneous value of curvature (k) of the travel trajectory of the vehicle (1) to be controlled, at any one time, is delayed by a preset value, this delay being considered as well in the determination of the historical travel-course offset (yc_{hist}).

7. The method as recited in one of the preceding claims, wherein for the active (YC_{Act}) and the historical travel-course offset (yc_{hist}), a lane probability (spw_{Act} , spw_{Hist}) of the measured vehicle (5,8) is determined for the own lane and/or for the adjacent lanes (spw_L , spw_R) of the vehicle (1) to be determined.

8. The method as recited in Claim 7, wherein the two lane probabilities (spw_{Act} , spw_{Hist}) are mixed as a function of the quality of the historical lateral or travel-course offset (yc_{hist}) to form a new value (spw).

9. The method as recited in one of the preceding claims, wherein in the vehicle (1) to be controlled, a number of further detection devices (41,45,47,49,51) are provided for measuring the position of the objects (5) driving ahead, and to select an object (5,8) driving ahead as the vehicle to which the speed of the vehicle to be controlled should be adapted, all results from these detection devices (41,45,47,49,51) are evaluated and weighted.

10. The method as recited in Claim 9, wherein the evaluation and weighting are carried out using a video camera, a preferably satellite-supported navigational system, a system for analyzing fixed destinations, or a system for determining a collective yaw rate of objects (5,8) driving ahead.